FOREIGN AGRICULTURE

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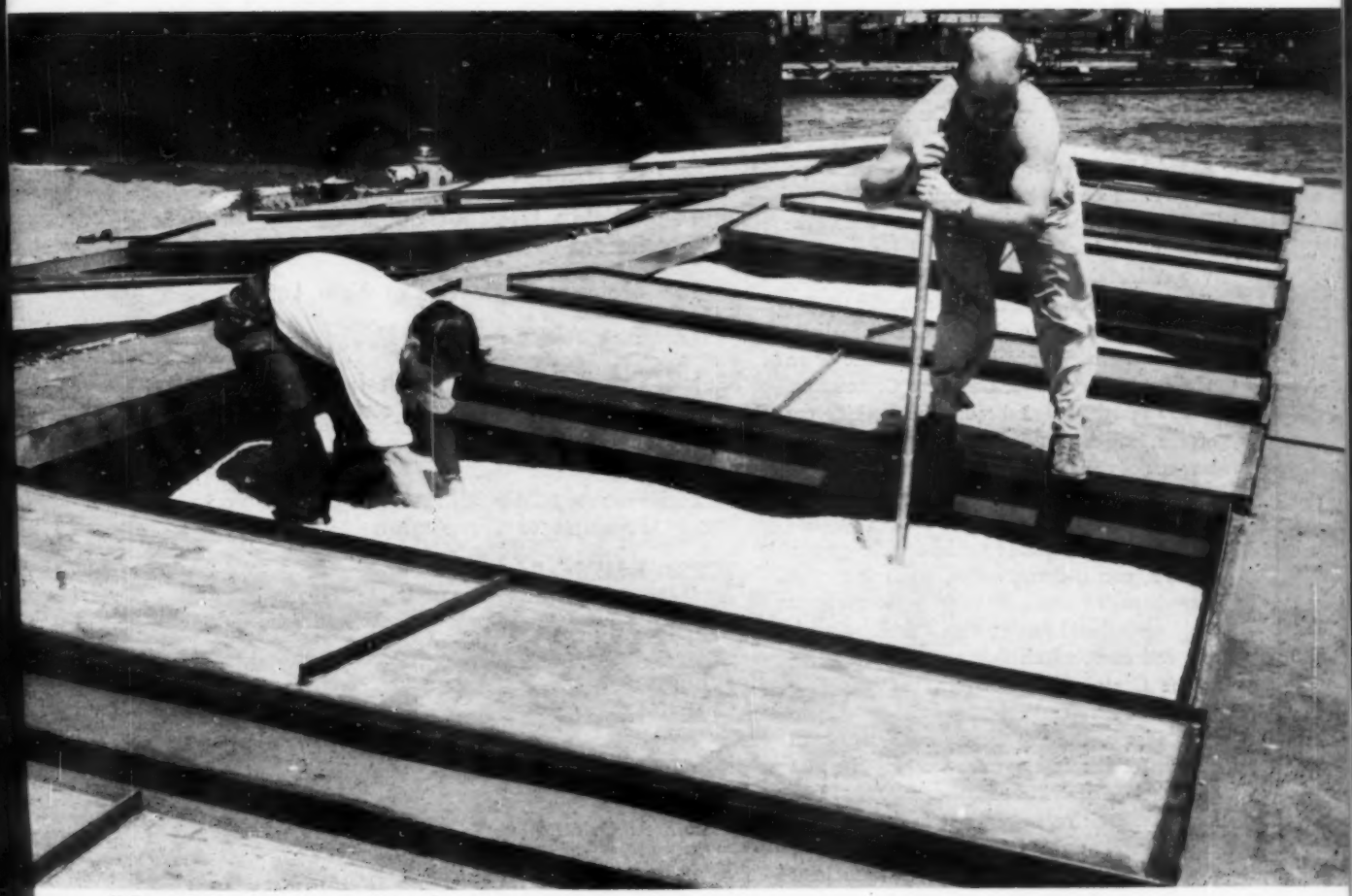

U.S. grain inspectors sampling wheat

Future of U.S. Wheat in World Trade

New U.S. Farm Export Record

Food for the Future

UNITED STATES DEPARTMENT OF AGRICULTURE · FOREIGN AGRICULTURAL SERVICE

To report and interpret world agricultural developments

FOREIGN AGRICULTURE

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Cooperation in the Caribbean

This fall, in the Caribbean, a 4-year-old experiment in cooperation comes to an end. Jamaica and Trinidad-Tobago have decided to go it alone, ending The West Indies Federation.

When one form of cooperation ceases, however, another has often long been ready to take its place. A year ago this month, a new Caribbean group was formed—the Caribbean Organization. Since its inauguration, 8 members have joined: France (for Martinique, Guadeloupe, and French Guiana), the Netherlands Antilles, Surinam, British Guiana, Puerto Rico, the Virgin Islands of the United States, the British Virgin Islands, and The West Indies (whose membership ended with the Federation).

In the Organization, the territories have direct representation. It inherited the mantle of an advisory body called the Caribbean Commission. It also inherited a vital task—the working out of the long-discussed Caribbean Plan for the best use of the area's economic resources.

For most of the members, the prime resource is agriculture. These territories are important suppliers of tropical products like sugar, bananas, cocoa, citrus, coffee, and spices; and they hope to increase their production of other agricultural products such as dairy products and meat, which they now import.

The Organization, however, has only "advisory and consultative" powers; so the Caribbean Plan will serve largely as a long-term outline for the development work of the area as a whole. Individual countries will, of course, formulate their own shorter term development programs. But the Organization itself offers the framework for as much or as little joint action as the Members may desire. It may well become a highly effective means through which these far-flung countries and islands can find common solutions to their common social and economic problems.

Cover Photograph

The U.S. system of grain inspection is one of the most efficient in the world. The problem is that present standards are not strict enough to ensure the high quality needed for exports.

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The wheat being harvested here in the Palouse area of the Pacific Northwest is soft, white wheat, famous for its high quality. Its superiority is so widely recognized that this wheat has consistently commanded premium prices in world markets.

By EDWARD F. SEEBORG
Grain and Feed Division
Foreign Agricultural Service

The Future of U.S. Wheat in World Trade

The international export movement of bread and coarse grains from surplus producing countries to deficit, or nonproducing countries, has been an outstanding feature of international trade for hundreds of years. Production for export has now reached such proportions that competition for export markets is keener today than at any time in history.

The share of the world's annual grain production moving into export channels ranges between 17 and 20 percent for wheat, around 4 to 5 percent for rice, around 8 percent for barley, and 7 percent for corn.

The export share of rye and oats has been less than 3 percent. Exports of grain sorghums have more than doubled in the past 7 years and now exceed 4 percent of world production.

The United States has been a major exporter of wheat since the beginning of this century, and exports have supplied an increasing portion of the U.S. grower's income. During the 1961-62 marketing year, the United States exported 57.5 percent of its total 1961 wheat production. For the past 2 years, exports have exceeded the total domestic use of wheat for food, feed, seed, and industrial use. Total exports for the 1961-62 fiscal year are expected to reach 714 million bushels.

U.S. wheat exports have, however, varied considerably since this country entered the world wheat trade picture. During the period of the great drought in the 30's the United States actually imported more wheat in some years than was exported. In the 1910-14 period, the United States was the largest single exporter of wheat with 16 percent of world trade. The U.S. position hit a low point in 1934-38 when it ranked fourth after Canada, Argentina, and Australia, and had only 10 percent of the total trade.

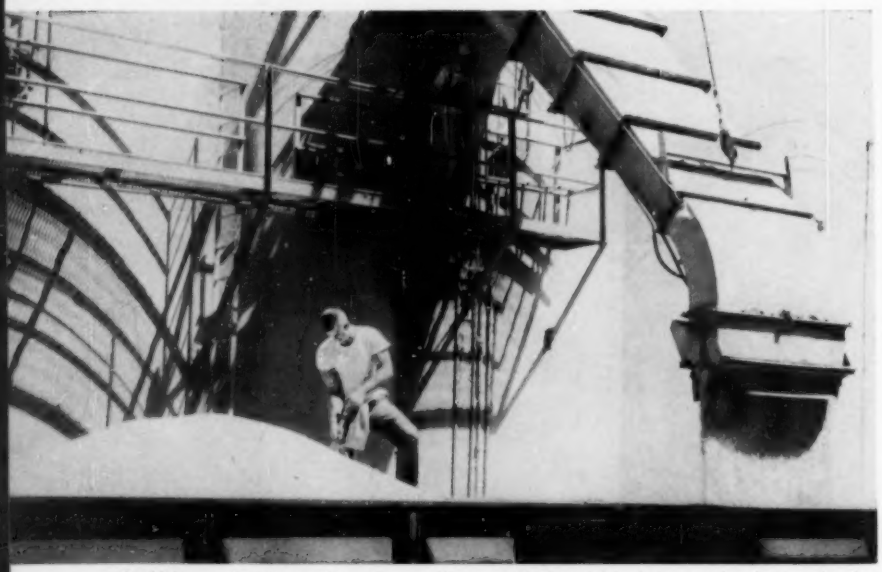
Since World War II, the United States has been the leading wheat exporter except in 1953 and 1954 when Canada took first place. The U.S. share of the world trade has ranged from a low of 32 percent in 1954 to a high of 52 percent in both 1947 and 1957.

During this entire period, however, large quantities of U.S. wheat have been exported under various foreign assistance programs, such as the Marshall Plan and Food for Peace. Approximately 70 percent of U.S. sales in 1960 and 1961 have been under these foreign assistance programs. Hence, while the United States is now by far the most important supplier in total tonnage to all markets, Canadian sales of wheat for dollars surpass U.S. dollar sales by almost 50 percent.

Ten countries are now listed as exporters under the new International Wheat Agreement: Argentina, Australia, Canada, France, Italy, Mexico, Spain, Sweden, the United States, and the USSR. During the 1960-61 fiscal year, world trade in wheat was divided as follows: United States, 43.6 percent; Canada, 22.5; Australia, 12.1; USSR, 8.9; Argentina, 4.6; and all others, 8.3 percent.

Total world trade in wheat this year will approximate 44 million metric tons, or 1,600 million bushels. Ten years ago this total was 29 million tons. This 52-percent increase is significantly greater than population growth during the same period.

In the past 10 years, trade within the Western Hemisphere has changed very little—that of Western and Eastern Europe has increased 28 percent. The big change, however, has occurred on the other side of the world. Africa's import trade has



A U.S. grain inspector digs with a 6-foot probe into grain being loaded onto a boxcar. This representative sample will then be tested for quality.

grown 54 percent, Asia's 97 percent. This growing trade with Africa and Asia is primarily responsible not only for the large increase in U.S. wheat exports, but for the expansion in the world wheat trade in general.

New Trade Factors

Recently, three new factors have entered the picture, and will undoubtedly have significant impact on world trade in wheat: The European Common Market Agricultural Policy, the new International Wheat Agreement, and Red China's sizable wheat imports.

The full impact of the Common Market agreement on U.S. wheat exports is yet unknown, as it did not take effect until last month. There are still a number of unresolved questions, but this much is reasonably certain. French wheat will be used much more in Western Europe and the United Kingdom. Common Market imports will tend to be limited to strong bread wheats. The market for U.S. "filler" type hard wheat will probably disappear. If we are to maintain wheat exports to that area we must supply strong bread wheats at competitive prices.

The new International Wheat Agreement recently concluded in Geneva took effect in July and will run for 3 years. For the first time, the USSR is a full party as an exporting nation. The Soviet position as one of the major exporters cannot be ignored. Russia's cooperation in this international agreement affecting wheat means that all countries exporting wheat in any significant quantities are now in the agreement.

The big decision this year at the IWA meetings was to increase both the floor and ceiling prices.

This increase amounts to 12½ cents per bushel at both ends—from $1.50 to $1.62½ per bushel minimum and from $1.90 to $2.02½ per bushel maximum. This price is based on Manitoba Northern No. 1 quality, in bulk, in store at Fort William/Port Arthur on Lake Superior. The agreement applies to commercial transactions. However, prices of wheat under Food-for-Peace programs are in line with commercial prices.

Another important development in the international wheat trade has been the trade between Red China and certain exporting countries, primarily Canada and Australia. Chinese purchases in the past 2 years have provided an outlet of such magnitude that Canada has largely eliminated excess stocks and Australia has disposed of two successive record wheat crops. Carryover in Canada will be reduced to near normal proportions for the first time in about 10 years. Increased production is being encouraged in both countries. Argentina has also sold wheat, as well as some corn, to Communist China.

During the years in which the United States has been competing for wheat exports, it has been largely on the basis of low price and fair-to-average quality. The need for wheat—almost any kind or quality of wheat—was so critical immediately after World War II that little attention was paid to quality. Also many overseas markets were asking for the cheapest wheat available in order to maximize calories.

Under this kind of a seller's market our grain trade expanded facilities at ports and interior terminals to take care of what many felt to be only a temporary relief market. All subclasses and grades were marketed, with by far the biggest share of business being done in grade No. 2 or better. This applied to all classes—white wheat, hard red winter, hard red spring, and red winter. Biggest sales were of hard red winter wheat, usually because it was in most abundant supply and most readily available at export positions.

New Look at U.S. Wheat

At the end of the war, most buyers were not asking for protein, mixing strength, less cleanout, or any other quality characteristics. Those who could afford it bought Canadian Manitoba to provide milling and baking quality in their blends. The United States, with one notable exception, was largely a supplier of calories. The big exception was our Western white wheat which had established such a reputation as a quality soft wheat that some buyers paid a premium for it.

The entire picture began to change around 1954. Agricultural production in deficit areas increased, particularly in wheat and other grains. France and Italy began to produce more than enough to meet domestic requirements.

Major exporting countries like the United States, Canada, and Australia expanded production far beyond their ability to find new markets and all accumulated large excess stocks.

The economies of devastated countries like Germany and Japan made amazing recoveries. Japan became the

world's second-largest dollar market for wheat, Germany, the third. Both could now obtain the types and qualities of wheat they wanted to purchase.

Emphasis on Quality

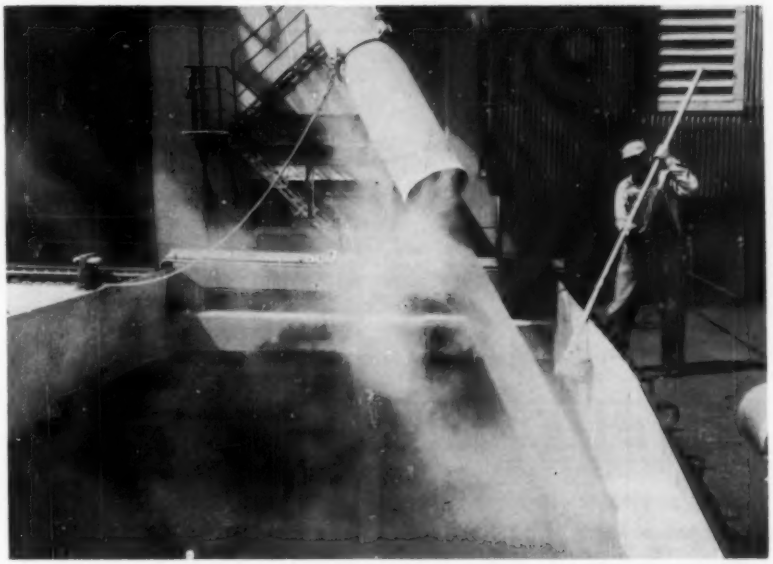
Japan's annual per capita consumption of wheat products in the 1950's became three times the prewar figure. Since then, though actual per capita consumption has increased very little, the demand has shifted significantly from soft wheat for noodles to quality hard wheat for bread. Japanese imports of hard wheats have increased sharply year after year.

Since 1957, Japan has been U.S. wheat's most important dollar market. Even so, the U.S. share of the market has fallen from 68 percent in 1954 to 32 percent in 1961. Over the same period, cash sales of Canadian hard wheat to Japan have risen by 30-40 million bushels. Practically all this shift was due to Canada's ability to deliver a consistently high-quality product from the West Coast. The United States' high-quality wheat has been either all utilized by U.S. mills or out of position for delivery to Japan from the West Coast.

The significance of the Japanese market to the U.S. wheat industry is heightened by the possible loss of some of our wheat market in Common Market countries. During 1958-59, U.S. wheat exports to Japan equaled wheat and flour exports to the six Common Market countries combined. Doubling our current wheat exports to Japan—which is held possible if suitable qualities can be provided—would enable the United States to maintain its current rate of dollar exports.

Official U.S. Grain Standards

Wheat, as it is handled in merchandising and storage operations in the United States, is a fluid commodity. Commingling and substitution of like grades, but possibly differing milling and baking qualities, is an accepted part of grain merchandising. This is done in order to supply domestic millers with very specific quality characteristics such as mixing and fermentation quality, gluten strength, and water absorptive capacity. Domestic millers pay a premium in order to obtain these special qualities if such wheat is in short supply.



Above, an inspector gets a sample by moving a pelican (a scoop affixed to a pole) through the grain as it streams into the hold. At right, a composite is made from a number of similar samples.

However, the Official U.S. Grain Standards for wheat do not describe wheat with sufficient discrimination to characterize many of the important milling and baking properties sought by the mills. Warehousemen, therefore, in order to participate in bidding for domestic business continually scrutinize the milling and baking quality of their stocks, using many laboratory tests. The net result is a segregation of this fluid commodity, wheat, without necessarily changing the market grades of any of the segregates as measured by official standards.

One lot of No. 1 hard winter wheat, for example, could be, and often is, similar to another lot of No. 1 hard winter only in its physical characteristics as measured by the Grain Standards. One lot could have excellent milling and baking properties while the other might have mediocre milling and baking properties. This difference can exist even if both lots are at the same protein level. Protein content—which, by the way, is not a part of official standards—is a relatively poor indicator of the bread-baking strength of wheat, since the quality of the protein is at least equally as important as the quantity. Baking quality is reflected better by the sedimentation value.

Higher Standards Needed

Retention of our best hard wheats for domestic use by this marketing segregation process results in a concentration of the lesser qualities in carryover stocks and in wheat being accumulated for export. While Canada, our principal competitor, has zealously guarded the milling and baking properties of Canadian Manitoba for export through rigid govern-

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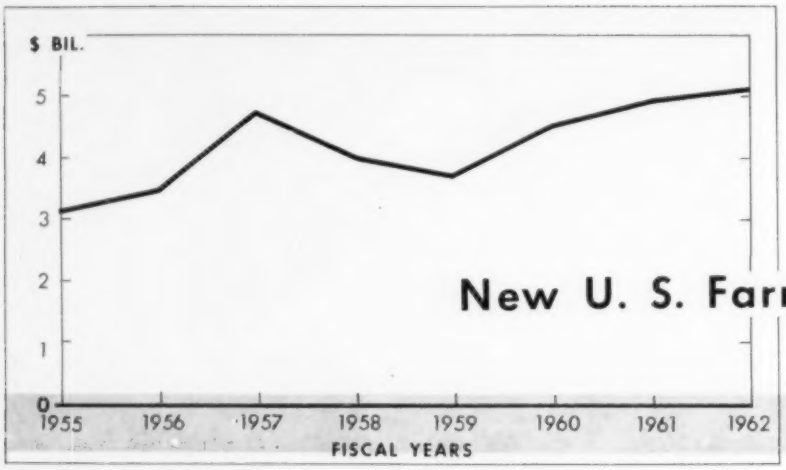


New U. S. Farm Export Record

By DEWAIN H. RAHE
Development and Trade Analysis
Economic Research Service

The fiscal year that ended June 30, 1962, was another benchmark for U.S. agricultural exports. In value, they reached an alltime high of $5,139 million, $193 million above the previous record of $4,946 million the year before. In volume, they were 2 percent above last year's record.

Major shifts in feed grains, wheat, and cotton dominated the export picture in 1961-62. Feed grain exports increased by $160 million and wheat by $135 million, while cotton shipments declined by $285 million. There were moderate increases in soybeans, fruits, cottonseed and soybean oil, poultry meat, tobacco, and vegetables but little or no change in rice, variety meats, animal fats, hides and skins, and dairy products.

The export record added up to 15 percent of total cash receipts from farm marketings. The foreign market accounted for over half of the wheat, rice, and dried peas that U.S. farmers produced; two-fifths of the tallow; and around a third of the tobacco, cotton, soybeans (including bean equivalent of oil), nonfat dry milk, and hides and skins.

Nearly 70 percent of the exports were sales for dollars; these totaled $3.5 billion, compared with $3.4 billion in the previous year. Besides unassisted commercial transactions, dollar sales included shipments of some commodities with government assistance by means of (1) short-term credits; (2) sales of government-owned commodities at less than domestic prices, and (3) export payments in cash or in kind.

The principal gain in dollar sales occurred in feed grains, exports of which increased by one-fourth in value. Other dollar gains came from wheat, tobacco, soybeans, fruits, and animal products. During this period, however, there was a substantial decline in dollar exports of cotton, which decreased by one-third.

The remaining 30 percent of the exports moved under Public Laws 480 (the Agricultural Trade Development and Assistance Act of 1954, as amended) and 665 (the Mutual Security Act of 1954, as amended). Shipments under these programs totaled $1.6 billion compared with $1.5 billion in the previous year.

European Buyers Prosper

Continued advances in economic activity in the industrialized countries of Western Europe contributed most to the record level of exports in the past year. Western Europe's economic activity increased by 4 percent. An indication of the foreign purchasing power available came from the record amounts of gold and dollars held by many U.S. trading partners.

In addition, U.S. exports of farm products were encouraged by the vigorous market promotion program carried out jointly by USDA and industry groups, by redoubled efforts to negotiate favorable trade access terms, and by competitive pricing of export commodities, in some cases through the use of export payments.

Animals, Cotton, Fruits

Exports of *animals and animal products* totaled an estimated $618 million compared with $613 million a year ago. Gains in tallow, variety meats, and poultry meat were about offset by declines in lard and other products. Smaller lard exports reflected the loss of the Cuban market and increased European production. Exports of hides and skins and dairy products were substantially unchanged in value.

Cotton exports, excluding linters, totaled an estimated 4.7 million running bales compared with 7 million in 1960-61. The decline reflected mainly the substantial drop in inventories and consumption in foreign importing countries, moderately larger supplies abroad, and greater competition from foreign producers as prices of U.S. cotton in foreign markets continued somewhat above the levels of a year earlier. Less cotton went to Western Europe and Japan, top markets.

Exports of *fruits and preparations* totaled a record estimated $280 million, compared with $254 million in 1960-61. These exports were stimulated by Western Europe's small deciduous crop and its further relaxation of trade restrictions. Substantial export gains occurred in fresh apples and canned fruits, with smaller increases for raisins, prunes, fresh oranges, and fruit juices. Larger U.S. production of apples and oranges plus lower prices aided exports.

Wheat, Feed Grains, Rice

Among the grains, shipments of *wheat and flour* (grain equivalent) were an estimated 715 million bushels compared with 661 million a year ago. Increases occurred in both commercial sales for dollars and shipments under government-financed programs. For the first time, wheat and flour shipments amounting to over 7 million bushels moved under Title IV of P.L. 480, which provides for long-term dollar credit sales. Increases occurred in sales for foreign currency under Title I of the law, in barter transactions under Title III, and in donations under both Titles II and III. Total wheat and flour exports to Brazil, the Netherlands, Yugoslavia, Turkey, and Chile increased substantially. Major reductions occured in exports to Italy, Poland, and India.

Exports of *feed grains*, excluding products, are estimated at 14 million metric tons, a new record compared with 11 million a year earlier. The gain was brought about largely by heavy corn exports since January, for exports of feed grains before that month were below the levels of a year earlier, and exports of oats, grain sorghums, and barley were smaller in 1961-62 than in the previous year. Feed-grain shipments to Canada, West Germany, the United Kingdom, Japan, and UAR-Egypt gained substantially. More corn was shipped to Canada to supplement reduced feed supplies resulting from the 1961 drought, and the United Kingdom substituted corn imports for other grains. Smaller exportable supplies in other major producing countries also encouraged purchases from the United States. Exports of feed grains to Japan and Western European countries were spurred by the expansion of livestock production and the continuation of rapid industrial advances.

Exports of *milled rice* totaled an estimated 20.3 million bags, compared with 21.5 million in 1960-61. Most of the decline occurred in exports to Asia (principally Pakistan and India) under government-financed programs.

Exports of rice for dollars gained about one-fourth, principally to countries in Western Europe. Exports to Africa also substantially increased.

Oilseeds and Products

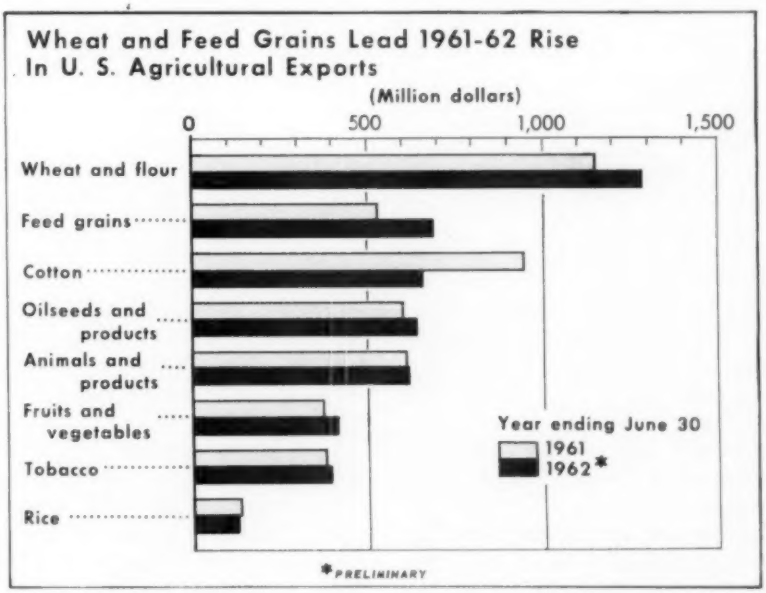
Among the oilseeds and products, *soybean* exports totaled an estimated 147 million bushels, breaking the previous record of 143 million in 1960-61. Higher prices advanced value by 8 percent. In recent years, many of the industrialized countries in Western Europe have been increasing their purchases of soybeans in lieu of vegetable oils, to obtain by-product protein meal for livestock feed. Other developments that have tended to encourage U.S. soybean exports include the record U.S. production levels and the relatively small quantities of beans available for export from Communist China. Also, foreign exportable supplies have not been able to keep pace with demand. U.S. exports have increased from about 20 percent of world trade in 1950-54 to an estimated 33 percent in 1962.

Exports of *cottonseed and soybean oils*, excluding donations under Title III of P.L. 480, totaled an estimated 1,314 million pounds, 7 percent above actual exports of 1,231 million a year earlier. Including USDA estimates for Title III donations—238 million pounds in 1961-62 and 31 million in 1960-61—exports were 23 percent larger in 1961-62. During 1961-62, about 60 percent of the vegetable oil exports moved under specified government programs, particularly Titles I and III of P. L. 480.

Tobacco, Vegetables

Exports of unmanufactured *tobacco* totaled an estimated 508 million pounds (export weight), slightly above last year's 504 million. Exports in recent years have been relatively stable. The annual 3-percent rise in foreign tobacco use has been met mainly by increased foreign production, chiefly in Rhodesia-Nyasaland, Greece, and Turkey. But U.S. exports have been maintained at a fairly high level by the continued rising use of tobacco in foreign countries and the availability of high-quality U.S. leaf. Higher prices last year advanced export value to a new record.

Vegetables and preparations totaled an estimated $135 million, compared with $127 million in 1960-61. Exports were marked by major shifts in several products. Bean exports fell considerably, reflecting bigger crops in Latin American countries and large canned stocks in Western Europe. A gain in white potatoes, however, evidenced a marked increase in the 1961 U.S. crop and lower output in Western Europe. Exports of canned vegetables have increased, principally to Western Europe in response to advancing standards of living and the gradual lifting of trade barriers.



Guatemala Develops Its Rubber Industry

The government hopes that rubber exports will make up for the losses that may come from coffee and bananas

Above, a trial planting of rubber trees. Right, a class of plantation workers receives instruction in the delicate art of rubber tapping; new crops need new techniques.

By MARY S. COYNER
Regional Analysis Division
Economic Research Service

Guatemala's two big export crops are coffee and bananas. Together they account for over 80 percent of the $100 million in foreign exchange that the country earns annually. Their future, though, is somewhat uncertain.

At current export levels, a 1-cent-a-pound drop in coffee prices could cause a loss of $1.5 million a year in foreign exchange. As for bananas, the retirement of one banana company and reduced activity on the part of the other will cause a direct loss from this crop of almost $8 million a year.

To offset these losses the Guatemalan Government is widening its agricultural base. It is turning to crops that will increase the country's export earnings and can replace commodities now being imported. The principal ones being developed are rubber, cotton, sugarcane, and oilseeds—with rubber and cotton probably the two most important.

Rubber development in Guatemala dates from 1942, when U.S. Department of Agriculture technicians began experimental plantings in cooperation with the Guatemalan Government. Their purpose was to expand rubber production in the Western Hemisphere to replace Far Eastern sources cut off by the war. This work has continued, with the help of the International Cooperation Administration, now known as the Agency for International Development, or AID.

Declining coffee prices during the past 5 years have given additional stimulus to rubber-growing. The Guatemalan Government has set up a rubber development scheme and secured a Development Loan Fund loan of $5 million. Last year the Guatemalan Congress passed a law which encourages rubber production through its tax-relief provisions. And in that same year, over 5,000 acres of rubber were planted, bringing the total acreage to more than 11,000 acres. Current estimates indicate that an additional 6,000 acres will be planted this year.

Production plans visualize an ultimate increase in rubber plantings from the 17,000 acres in 1962 to a total of 80,000 acres. As the first step toward this goal, plans call for increased plantings for the 5-year period, 1963-67, at the rate of 6,000 acres a year, to give a total of 47,000 acres. Production from this acreage would provide the equivalent of $12 million in foreign exchange a year.

Guatemala's optimism with regard to rubber can be traced in part to

(Continued on page 21)

Food for the Future
—a plea for an international supply network

By ROGER SAVARY, Secretary General
International Federation of Agricultural Producers, Paris

"The world agricultural situation in relation to economic development and changing economic patterns" is a subject broad enough to make any speaker's head swim. But it is still more overwhelming when, instead of approaching it on strictly economic terms—that is to say, from the viewpoint of actual supply and effective demand—one has to envisage food requirements not yet backed up by trading or purchasing power.

Many of the difficulties which have been exercising our minds during recent decades would obviously resolve themselves if we could accept Malthus' cynical view that a man who is born in a world already occupied has no right, if society does not need his work, to claim even the minutest food ration and, in fact, is in surplus.

But no man of the twentieth century could write this and remain at peace with his conscience. We have indeed gone a long way toward universal acceptance of the philosophy that every citizen of every nation is to some degree responsible for the minimum welfare of every member of the human race. No one can wash his hands of the responsibility for the plight of unknown millions of men, women, and children, living or unborn, in far-away countries. And least of all, those of us who are privileged to be members of an "affluent society."

Orienting Human Activities

For the economists the challenge is therefore no longer that of explaining in a detached way how economic factors combine through enterprise to make the production of goods profitable and how these goods are traded among men and nations. Rather, it is to orient human activities that every one of the rapidly increasing billions of human beings can, by work and initiative, enjoy a decent life.

Agriculture—the production of food and fiber—forestry, and fisheries are the fundamental sources from which man's basic requirements are to be met. It is hardly an exaggeration to state that, in order to satisfy these growing requirements of mankind, absolute priority must be given to an expansion of these industries—and also to an ever more generous distribution of food supplies by those countries having an overabundance.

I would like to omit from my remarks the essential points on which there is almost unanimous agreement among specialists of all countries: short-term limitations of a birth control policy, limited opportunities for massive migration, the marginal effect of international trade in relation to growing food needs, and the inescapable necessity of increasing domestic food production, especially in Asia.

I personally endorse these conclusions but I will attempt to focus attention on a number of related issues about which there is still room for considerable research and discussion before anything like definite conclusions can be drawn.

Social-Political Patterns

The first of these—and it is a crucial one—has to do with the traditional social-political patterns prevailing in most countries where food production lags behind the nutritional requirements of a growing population. It is tempting to avoid debating this problem in any international forum because the risk is great that any criticism will be denounced as an unwarranted intrusion by ignorant outsiders in the cultural and historical heritage of venerable civilizations.

But is it not unrealistic to even begin to consider agricultural production problems in developing areas by accepting as a fact a structure of society which precludes its expansion?

At this stage of world evolution it is perhaps more appropriate to start asking whether or not the most urgent need of a number of developing countries (who as we all know face the prospect of increasing scarcity of food) is not so much augmented foreign assistance, technical or financial, however indispensable this may be, as a change in their political systems.

This presumably naive comment is especially relevant in view of the somber picture of imbalance between supplies and needs which is conjured up by statisticians' extrapolations. We may as well pause a moment to ask ourselves what the actual result of worsening food shortages, should they materialize, would be for the peoples of the countries concerned. In other words, to ask ourselves who in these countries would have his diet reduced to starvation level and who would manage to secure sufficient food for himself and his dependents.

If and when the progressive reduction in the per capita availability of calories and proteins reaches dramatic proportions, it is of course unlikely, even under the most efficient rationing system, that every consumer will get a share of an inadequate total food supply at least proportionate to his physical requirements. The chances are that a ruling faction will establish or reinforce a totalitarian system to safeguard its privileges.

In the economist's vocabulary this can assume various names: rising food prices, lower and lower wages for harder and harder work, etc. But the end result is always the same: a growing number of people, but by no means *all* the people, have progressively less and less to eat and they turn progressively to less and less nutritious foods.

Hunger—and the Economy

Because poverty at its worst is synonymous with starvation or semi-

Mr. Savary's talk, presented here in a slightly condensed form, was delivered at USDA's World Food Forum, held in Washington, in May. Opinions expressed are the author's and not necessarily those of the U.S. Department of Agriculture.

starvation, the temptation is seldom resisted to state, as in many international studies, that the basic cause of hunger is poverty and that the cure for hunger is economic development. This is apparently one of the few universally accepted notions to which I referred earlier. But is this unequivocal? Is it true that economic development in the usual contemporary sense—that is, industrialization and agricultural expansion going hand in hand in what is known as balanced economic development—is a pre-condition to, indeed is consistent with, the provision of sufficient food supplies for a growing population?

How many of the developing countries that have had the foresight and the talent necessary to evolve devolopment planning on a significant scale have also had the means and the courage to extend their forecasting to that critical period, perhaps 15 to 20 years hence, when the population explosion will make its full effects felt?

Basic industries and manufactures are essential to provide employment, to create purchasing power, and to broaden the basis of the economy, but they are not a substitute for food. And the best conceived programs, even the most successful programs of industrialization, may in the end leave certain countries better equipped to supply their populations with consumer goods but still short of the basic food they need.

Emerging nations are often inclined to believe that any advice to give priority to their agricultural development is prompted by a Machiavellian design intended to perpetuate some form of "colonial pact." But the truth is that it is not for any reason related to an international division of labor between industrialized and non-industrialized countries that agriculture should be given a higher priority in many developing countries. It is simply because of their own prospective food needs.

Buying on World Markets

Let us now turn to another controversial question—one which does not involve the feelings and the interests of people in developing nations only but those of people in wealthier countries as well. This is a question which for 15 years has sharply divided nations at international conferences.

Let us consider whether there are reasonable prospects that developing nations will, in future years, become larger importers of food on commercial terms—in other words, whether they will be able and willing to purchase food from the wealthier and more productive nations on world markets.

At this juncture I am driven to make bold, and therefore controversial, statements. I believe:

(1) that whatever success developing nations with fast-growing populations manage to achieve in expanding their economy, in increasing their national product, and in overcoming barriers to their export trade—they will not, in the foreseeable future (even with the help of a considerably stepped-up supply of foreign capital both public and private), earn enough foreign currency to finance at one and the same time the fundamental import requirements of equipment and raw materials associated with such economic growth *plus* food supplies;

(2) that there is therefore a quasi-certainty that most if not all of the food import requirements of developing nations will have to be met from international aid granted especially for that purpose or from so-called surplus utilization programs;

(3) that it is most likely that all the efforts made by food-exporting countries to protect what they consider to be their prospective markets in developing countries (particularly by opposing a greater and faster expansion of surplus utilization operations) will have been in vain.

Multilateral Food Aid

And I draw from these premises the conclusion that agricultural exporting countries who look to developing countries for outlets would in their own interests be well advised to promote and support multilaterally financed and managed food aid programs. (The sole exception is the United States which happens to have both the food surpluses and the financial wherewithal to conduct a P.L. 480 program.)

Such conclusions are, of course, equally unpopular with food exporters (who like to dream of an expanding commercial market for their produce) and with developing countries in need of food (who like to dream that they will eventually become customers in good standing rather than perennial recipients of food aid).

The only alternative that I can envision would be an international program placing dollars for the purchase of food on commercial terms at the disposal of countries in need. A policy to restore international commodity markets to their past glory could be crowned by such a program. But this will in all probability be unnecessary because it is most unlikely that the industrialized countries will, in the foreseeable future, abandon the domestic agricultural policies which have reduced international agricultural trade to a mere carrying-out of governmental import and price policies.

Reappraisal Needed

My comments today have probably done nothing much to bring us closer to the formulation of a coherent economic policy for the future. My purpose was rather to emphasize that the world agricultural situation, as it is related to economic development and changing economic patterns, calls for a sobering reappraisal of accepted notions. It calls for the recognition of the fact that world agriculture and agricultural trade are not moving in the direction of a return to the free market economy. Rather they imply an increasing degree of market management on an international basis.

The United States has historically been placed in a position to exert leadership in the Free World and to a considerable extent in the world at large. But it can only exert that leadership in directions which are consistent with the trends and the requirements of world economy and with the needs of emerging nations.

What the world needs today is a comprehensive network of international arrangements covering the production and distribution of food—what our Federation has called an International Food and Farm Policy. Such a network would integrate food aid in an overall program of economic and technical assistance to developing countries, under the United Nations.

Latin America's Yerva
–twenty million people drink it

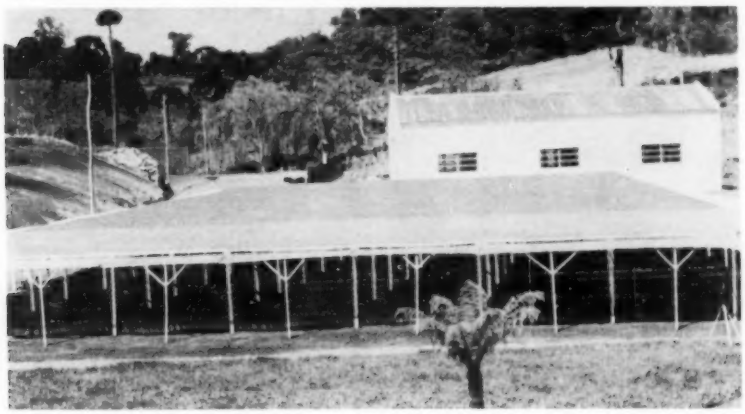
In the seventeenth century when the Jesuits built their missions south of the Rio Grande, they found the Indians brewing tea from the dried leaves of a tree that belongs to the holly family. Delighted with its refreshing though somewhat bitter taste, the mission fathers started to cultivate the tree, so that for many years this beverage was known as the Jesuit's Tea.

Today, yerva, yerva maté, or just plain maté, as it is variously called, still comes from this same area—the subtropical lands of southeastern Brazil, Paraguay, and northern Argentina. And despite Latin America's great abundance of coffee, maté is becoming more and more popular and its production is increasing.

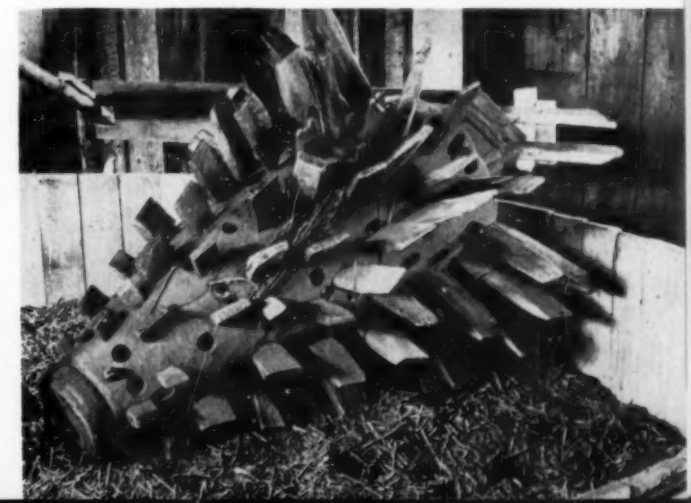
In the last decade the three countries have upped their output almost 50 percent, to slightly over 262,000 metric tons a year. Argentina is the largest producer, also the largest importer and consumer. Brazil, however, which ranks second, has just opened the first "instant maté" factory, annual capacity 420 metric tons.

Native maté tree growing in Brazil. When cultivated the trees are kept shrub-size for easy picking.

Below, maté experiment station, in Ilopis, Brazil. Right, Miss Brazil 1961 sips maté through a small tube from the traditional silver-mounted calabash.



Left, Brazilian farmer brings in load of leaves for drying. Below, after leaves are dried they are ground into a powder in a machine that looks like the nose of a space satellite.



Japan's Farm Imports and the U.S. Stake

By JOSEPH C. DODSON
U.S. Agricultural Attaché, Tokyo

Japan ranks as one of the great dollar markets for U.S. agricultural products. In some years it is the No. 1 outlet, in others the United Kingdom leads.

Successfully holding this market, and expanding it, depends on many factors. The key one, obviously, is the state of the Japanese economy. For several years this economy has been expanding at a surprising and truly impressive pace. In 1959, the growth rate was 18 percent and in 1960, 13 percent.

Concerned with possible repercussions, the Japanese Government late in 1961 took steps to slow down the growth process. This policy is now showing some effect. Growth during the Japanese fiscal year, ending March 1962, was about 10 percent, and according to the government's expectations, should drop to about 5 percent this fiscal year.

One reason for the government's concern about overexpansion was a fairly sharp decline in foreign exchange reserves during 1961. By the end of the year, they had declined to less than $1.5 billion, a loss of about $340 million from a year earlier. During the first half of 1962, the level of reserves tended to stabilize, and there is some optimism that the low point has been reached. So in the near future, at least, Japan's imports of U.S. farm products should not be seriously affected by shortage of foreign exchange.

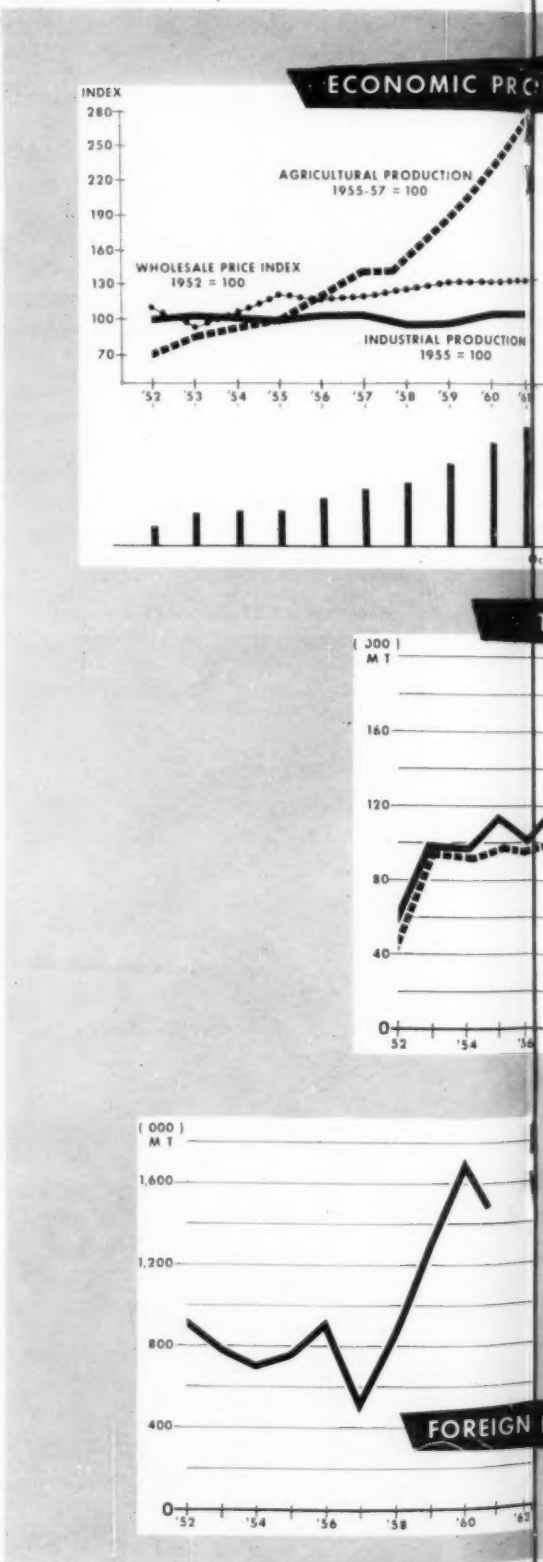
Last year was a time of high prosperity and record employment in Japan. Agriculture shared in this prosperity, although to a lesser extent than industry. The agricultural production index increased 3 percent and is projected to rise by 4 percent this year. Net agricultural income increased 7 percent and probably will increase 4 percent in 1962. But with the heavy industrial expansion, there has been an outflow of labor from farms, which has caused some shortage of farm workers.

Besides the strong, growing economy, there are several other "plus" factors. Reduction of trade restrictions is a fixed policy of the Japanese Government (although progress is not entirely satisfactory on the agricultural side). Japan's requirements for many agricultural commodities are growing, along with population and purchasing power. And the close and friendly relations between the United States and Japan help stimulate trade.

On the "minus" side is the competition we face, which tends to limit our market. With some commodities—corn, for example—Japan tries to maximize its purchases from certain countries, in order to promote its exports to those countries. With others, there are alleged quality disadvantages, some real, some not. There are complaints about the light color of our corn, and Manitoba wheats are preferred to our hard wheats. Then there are some minor problems, such as U.S. restrictions on imports of Japanese commodities. However justified, these tend to be irritants in our trade relations.

Nevertheless, 1961 set a record for Japan's imports of U.S. farm products—over $554 million worth. The outlook for 1962, as far as total sales volume is concerned, is clouded by a probable substantial decline in Japan's imports of cotton. Whether the expected increases for feed grains, wheat, and other items will offset the loss in cotton is problematical. By commodities, our 1962 trade is likely to be as follows:

Cotton imports were liberalized in April 1961. Partly as a result, U.S.



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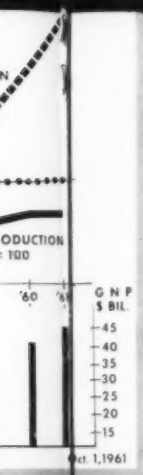
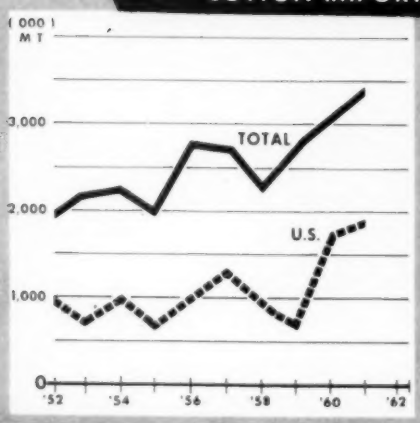
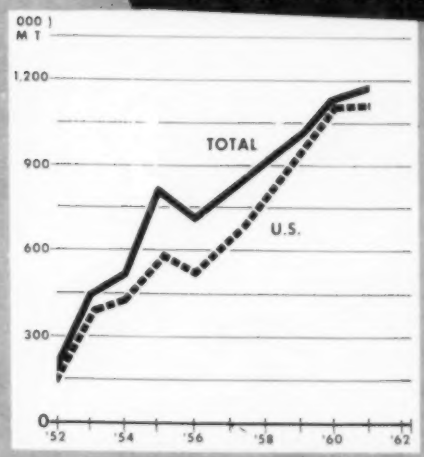


COTTON IMPORTS

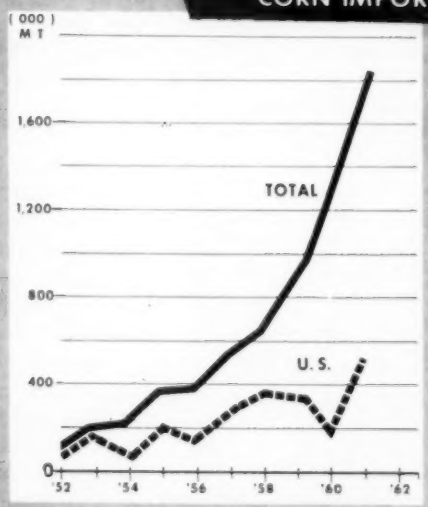


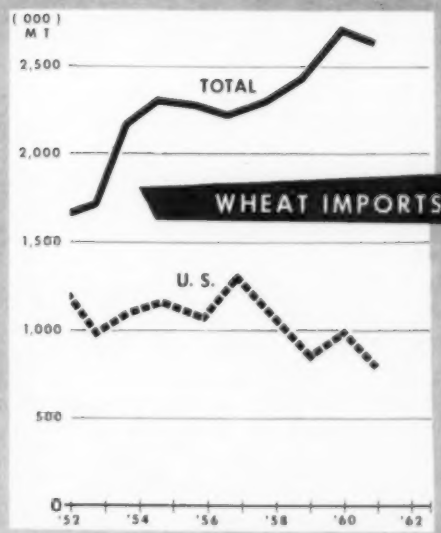
SOYBEAN IMPORTS



TALLOW IMPORTS

CORN IMPORTS





WHEAT IMPORTS

OREIGN EXCHANGE RESERVE

shipments last year set a record of almost 2 million bales. In the early part of 1962 they dropped sharply, partly because of the government's "tight money" policy. Mill operations are sharply curtailed to try to work off surplus stocks of yarn. Even if imports in the latter part of the year are accelerated, it is likely that our 1962 sales will be well below the level of 1961.

Looking farther ahead, Japan should remain a good long-term market for cotton, despite inroads from synthetic fibers. It has a highly efficient cotton textile industry, which is very competitive in the export market. And expected increases in per capita income should encourage domestic consumption of cotton.

Soybean purchases by Japan have been rising sharply for several years, with the United States supplying the great majority of the beans. There, too, imports were liberalized in 1961; however, the volume of imports did not increase as much as expected, partly because of high and fluctuating prices, and partly because of an increase in the tariff. The tariff rate is now 13 percent. The crushers contend that this rate places soybeans at a disadvantage in competition with other oils, and they are pressing the government for either removal of the tariff or a reduction.

The big question mark in our export of soybeans to Japan is Communist China. Imports from China went down to virtually zero in 1959 and 1960. They began to reappear in 1961, and slowed down imports from the United States. Up to 200,000 tons may enter Japan from China this year. This would probably leave room for about 1 million to 1.1 million tons from the United States, or about the 1961 level. Because of higher oil content, U.S. soybeans are valued in the Japanese market at from 5 to 9 dollars per ton more than the Chinese beans.

Wheat prospects are somewhat brighter this year. Since 1957, imports of U.S. wheat have been on a downward trend, because of a declining demand for soft wheats and our inability to get a foothold in the hard wheat market. This year, however, Japanese authorities are actively interested in imports of U.S. hard wheat.

Supplies in the past have been almost entirely from Canada. Trial imports of U.S. hard winter wheat and followup testing appear to have been successful in convincing authorities of its acceptability, although they require a price differential from the Manitoba wheats.

We believe there is a good possibility that imports of U.S. wheat will rise to 1 million tons or more in 1962, from a 1961 low point of about 800,000 tons. We also think that imports at this level—or higher—can be maintained in future years if we continue competitive pricing policies.

Feed grains seem to offer the best trade prospects. Japan's feed grain imports have been rising very sharply as a dramatic expansion of the livestock industry has taken place. Tentative plans for even greater expansion would require an import level of about 6 million tons of feed grains in 10 years.

Until last year, the United States was not able to share proportionately in supplying the booming requirements. Then in 1961, imports of corn from the United States rose to over 500,000 tons, the highest on record. In addition, imports of grain sorghum from the United States reached almost 150,000 tons, more than triple those of the year before. Grain sorghum has proved popular with Japanese users, and imports from the United States should more than double in 1962. Further, we expect this upward trend to continue.

In the case of corn, we have been somewhat in the position of residual suppliers because of Japanese trade policies which maximize purchases from Thailand and certain other countries. Nevertheless, we believe that our sales of both corn and grain sorghum will increase.

Leaf tobacco shipments to Japan have been on a sharp uptrend since 1958, reaching a record of about $15.5 million in 1961. Increased consumption of quality cigarettes which use U.S. leaf has been the main factor. This trend should continue—although tobacco imports might be the most vulnerable in the event of serious foreign exchange difficulties. It appears that imports of U.S.-manufactured cigarettes will decline in 1962 because of the exchange problem.

Japan's imports of *beef tallow* for the soap industry, and of *hides and skins* for leather, have been steadily rising. The United States has supplied the bulk of both products. We should continue to increase our sales of hides and skins, but the tallow situation is less hopeful because of increasing use of detergents for laundry soap.

Certain *fruits* are in a good position. After liberalization of raisins last year, there was a marked increase in imports of California raisins, which should go on; and if current efforts for liberalization of lemons succeed, we shall see a definite rise in U.S. sales.

World's Livestock Count Climbs; Hogs Set Record

The latest "head count" of the world's cattle, hogs, and sheep shows totals up over those of 1961, with hogs hitting a new high.

World hog numbers, off during 1960, rose 4 percent to a record figure of 483 million head by 1962. The USSR's 13-percent increase in 1961 was the largest made by a continent, though its 66.6 million count was 13.3 million head below the North American total. High prices contributed to record production in most West European nations; however, none challenged the lead of China, the USSR, the United States, and Brazil, each with more than 45 million head.

At 1,035 million head, the world's cattle (and buffalo) were 20 million above the 1961 total. The USSR made the biggest increase—13 percent above 1961 figures and 44 percent above its 1951-55 average.

Improved pasture conditions, rather than prices (generally lower), were responsible for the 1- to 3-percent gain made around the world in sheep totals. The only loss was registered by North America, where Mexico's 200,000 increase could not outweigh reductions in U.S. and Canadian sheep flocks. Australia and the USSR, each with more than 135 million head, accounted for nearly 30 percent of the world sheep total.

Malayan Farmers Get New Land

By Q. MARTIN MORGAN
U.S. Agricultural Attaché
Kuala Lumpur, Malaya

The Federation of Malaya's second 5-year plan, which went into effect last year, calls for the expenditure of $709,500—$2,150 million in Malayan dollars—and of this, more than one-fourth will be used for the uplift of the nation's rural people.

By far the largest agricultural program, in terms of government investment, relates to the opening and settlement of new land. Most of the money is allocated for clearing and cultivating a total of 250,000 acres to be used for Federal-State land settlement projects. Additional amounts are provided for access roads, water supplies, and other amenities required for land settlement. Also, a sum has been earmarked for opening up additional land for farmers with small, uneconomic holdings.

Responsible for this program is the Federation's Ministry of Rural Development, formed in 1959 as the result of a top-level policy decision to mobilize all existing resources for rural development. The Federal Land Development Authority (FLDA) pioneered in this field, and under the new ministry it still carries forward its land schemes.

There are two types of land settlements—Federal and State. The FLDA was recently made responsible for all settlements of 2,000 acres or more. The Federal projects made a point of multi-racial participation—something that is emphasized also in the nationwide set-up of kampong (hamlet), district, and State development committees.

The State projects were patterned after and launched in cooperation with the FLDA schemes. So far the Federal and State authorities have worked together on 37 settlements, covering a total of 164,446 acres, on which it is expected that 14,500 families will be settled. The FLDA objective is to launch 12 new settlements each year, accommodating 400 families in all.

Settlers for the FLDA projects are

Malaya plans to buy 84 units like the one above, to clear and level 250,000 acres for Federal-State land settlement projects.

Labor, at right and below, has been contracted by the Malayan Government to do planting and building before the settlers arrive.

Rubber will be the mainstay of settlers' incomes in Malayan project. Here settlers learn seed germination techniques at one of the rubber nurseries.

chosen according to a point system based on age, health, technical as well as agricultural experience, and size of family. Successful candidates are then provided dwellings in the central village of a designated land area. Initially, the settlers erected their own houses, cleared the land, and planted rubber, all in cooperative work groups. However, the government found it more economical to contract for clearing the land, building the houses, and doing the planting, prior to the arrival of the settlers.

Each settler is allocated 6 to 8 acres of rubber and 2 to 4 acres for the cultivation of other approved crops to bring in a cash income before the rubber plantings mature. For the first year, a new settler is given a monthly allowance depending upon the size of his family, and this may be continued beyond a year if circumstances warrant. Credit is extended by the cooperative store, but cannot exceed the monthly allowance.

Also, to supplement the income of the settlers, another government ministry—for Agriculture and Cooperatives—supplies them with poultry, goats, cattle, and fresh-water fish. Breeding stocks are distributed on the basis of the settler's capacity to work. For example, an energetic farmer may be given 50 day-old chicks per month for 4 months. He is then expected to maintain and multiply this flock. This livestock distribution program has a self-perpetuating aspect in that each recipient is to give back the number of female progenies he has received.

In the village, settlers are provided with educational facilities for the primary grades, a community hall, a cooperative store, and a midwife service. And each settlement has a manager with several assistants, and the government provides clerical help.

Bilbut Valley Settlement

One of the earliest of the FLDA settlements is located in the Bilbut Valley, in the State of Pahang, and it illustrates some of the problems that FLDA encountered.

Originally the scheme was planned to encompass an area of 12,600 square miles for the settlement of 1,200 families. But prior to the selection of the site no land survey had been made and part of the area proved to be marshy; consequently, both the land area and the number of families have been reduced about half. It was here that the early settlers were brought in for much of the initial work, which proved to be more costly than expected and led the government to contracting for the work in advance of settlement.

The Bilbut Valley settlers are living on monthly grants of from $65 to $75 (Malayan dollars) a month. However, each settler is expected to repay the government for development costs plus the monthly grants and 7½ percent interest. Repayment is to begin from the 8th year, with the anticipation that final payment will be made by the end of the 15th year. When rubber plantings mature the settler's monthly income should be at least M$300 a month.

Need for Cash Crops

While most of the physical problems in land development have been or can be overcome, there are others of a less direct nature. One of these is diversification of crops. The Federation's economy would be greatly strengthened by the economic production of crops new to the area, particularly one that might substitute for rubber as a major cash crop for small holders.

To this end, the FLDA has negotiated for an oil palm project in cooperation with an estate in the State of Johore. The estate will process the smallholders' crops, and each settler is required to become a shareholder in the factory. To date, oil palm plantings have not been introduced in any of the settlements, largely because the initial investment for oil-palm-processing machinery is substantially greater than that for rubber-processing machinery.

Currently, the Federation has about 5.5 million acres in cultivation, roughly about 20 percent of the total land area. Rubber predominates, accounting for about 65 percent of the cultivated acreage, followed by rice, coconut, fruits, oil palm, spices, and miscellaneous crops.

It is estimated that some 6 million acres of jungle, or virgin land, in Malaya is suitable for cultivation, of which a million acres are above average fertility and an appreciable acreage is below. Thus, it is obvious that Malaya can eventually expand its cultivated area by at least 100 percent. And while the actual production potential may not be quite of the same order, the output of 6 million additional acres at current commodity prices would account for a more than 50-percent rise in national income.

Two of Ethiopia's six cotton mills. Above, outside an Addis Ababa mill jointly owned by an Indian firm and the government, manager talks to author. Left, workers in an Asmara mill (Eritrea), compressing hanks of yarn for shipment.

Two African Cotton Markets

By GUY A.W. SCHILLING
Cotton Division
Foreign Agricultural Service

Two of Africa's best markets for U.S. cotton today are Ethiopia and South Africa.

Ethiopia, an ancient empire, has moved in less than a generation from an economy primarily dependent on agriculture to early industrialization, centered around the processing of farm products. One of its important young industries is the manufacturing of cotton textiles.

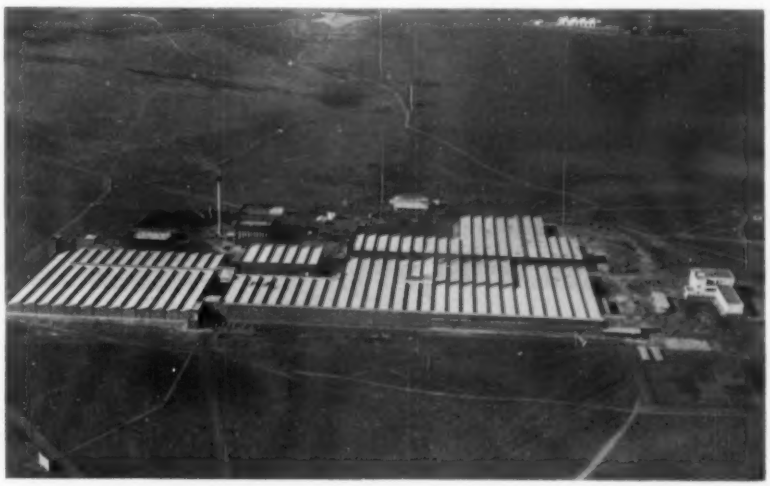
South Africa, a new republic (though an old country), has long had a well-developed industrial economy as well as a highly diversified agriculture. Its young but flourishing textile industry looks toward further growth. Like Ethiopia, however, South Africa at present produces insufficient cotton for its own needs.

Coffee is Ethiopia's major export, accounting for over 50 percent of the total; hides and skins come second. With world coffee prices down, however, the Ethiopian Government has a strong interest in saving foreign exchange. It is eying the largest single import category—raw cotton and textiles—to see whether textile imports cannot be partly replaced by local output.

Ethiopia now has 6 cotton mills, with an estimated total of about 81,000 spindles as of June 1 this year and more in prospect. Of the mills, 3 are privately owned, 1 government owned, and 2 half-and-half government and private. Government participation in mill ownership is considered to be a means of financing the industry's development, with eventual resale of the shares to the public.

For cotton, Ethiopia must depend largely on imports. Its own output for the cotton year 1962 is estimated at only about 8,000 bales, in comparison with present needs of about 45,000. This crop is considered to be still in an experimental stage.

Ethiopia has been buying about 10,000 bales of U.S. cotton a year, but Sudan is the major supplier. How-



South Africa's first cotton textile plant, now 13 years old, was financed jointly by the government and a famous Lancashire firm. It employs nearly 3,000 Bantu workers and 200 Europeans.

ever, there are limits to the amounts Sudan can supply. It is an increasingly heavy user itself of the American-seed Nuba Mountains cotton it sells to Ethiopia. The Sudanese consider the expansion of acreage for this type of cotton as unlikely, owing to the high cost of converting land to cotton and the greater need for other cottons for export. Thus the outlook for increased sales of comparable U.S. cotton to Ethiopia—perhaps under P.L. 480—seems good.

South Africa's cotton textile industry began to develop during World War II. Before then, it was one blanket factory operating on imported yarns. Now, it is one of Africa's largest textile industries, second only to Egypt's. It has about 230,000 spindles and 3,500 looms and uses around 100,000 bales of cotton a year—about half from the United States.

There are several reasons for this rapid growth. One is the government's desire to cut down textile imports; these are already only a fourth of what they were 10 years ago. Another is a strong domestic demand for cotton textiles. A third is the opportunity that this industry offers for employing the many non-Europeans living in areas away from the cities.

As the textile industry has grown, so too has domestic cotton production, but its further expansion is limited. The 1961-62 crop is about 32,000 bales, against practically none 20 years ago. Potential is probably no more than 60,000 bales in the next 10 to 15 years. Local farmers generally ask higher prices than mills are willing to pay, and the uncertainty of marketing discourages increases in cotton acreage.

Even at full potential, however, local production could not supply the industry's total need. Imports in 1960-61 ran about 75,000 bales. The United States was far in the lead with 51,000; next came Brazil with 8,000, then Uganda and Mozambique. U.S. cotton is slightly higher in price than the others, but regularity of supply is in its favor. U.S. suppliers can share in the bright future expected by the South African industry—if they pay due attention to the requirements and specifications of this fast-growing market.

Brazil Ends Decline in Its Cotton Exports, Resumes High Place on World Markets

After a 4-year slump in its cotton crop, Brazil is making a strong comeback on the world cotton market. In 1961, its exports totaled over 900,000 bales and it became the fifth largest cotton shipper in the world. These exports brought in the equivalent of $100 million, making Brazil's cotton second only to its coffee as an earner of foreign exchange.

A decade ago, Brazil had been one of the world's Big Four cotton exporters; its shipments of well over a million bales were exceeded only by those of the United States, Egypt, and the USSR. Output began to decline, however, and as stocks disappeared, exports declined also. For 4 years, they remained below 450,000 bales. At their lowest point—176,000 bales, in 1958—Brazil was no higher than 14th on the list of world exporters.

What caused the decline, and what has brought about the recovery?

Three things, separately or in combination, often contribute to decreases in cotton production and exports: Production costs that are out of line with world prices; inadequate price incentives; and damage from insects or disease.

In Brazil, though production costs have been fairly heavy, farmers have received from ginners 17 to 51 percent more than the guaranteed minimum support price, getting from $2.25 to a high of $3.19 per arroba of 15 kilograms (about 33 lb.), or as much as 9.8 cents per pound. This compares favorably with the prices received for other crops. In addition, when the domestic cotton price was above world prices, export subsidies—in the form of highly favorable exchange rates—had to be granted.

There remains the third reason: disease or insects. This was Brazil's main problem. Fusarium wilt attacked cotton in the State of São Paulo—major producing center—and caused a sharp decrease in production. Because of the losses they suffered, farmers found it more profitable to shift to other crops. This meant that cotton was only produced in areas where the wilt was not serious.

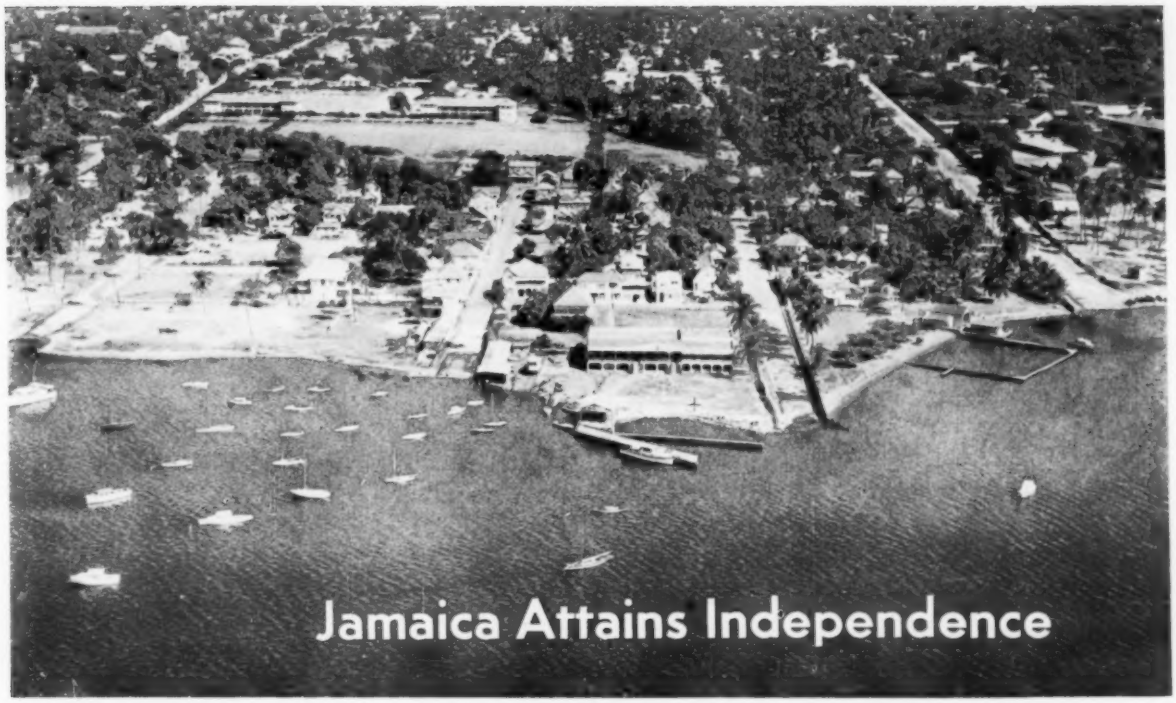
Fighting back, Brazil stepped up research on wilt. The experiment station in Campinas (near where cotton farming began in Brazil) developed a new cotton strain that was resistant to the wilt. In conjunction with this, the government imported 5,000 bags of seed of a wilt-resistant strain. This they gave to some of the commercial cotton firms that had experimental plots. Seed multiplication soon provided almost enough seed for distribution to farmers who wanted to buy it. By 1962, 500,000 bags of seed were available—an adequate quantity to plant in the areas needing this type of seed.

While this research was going on, the problem was being tackled also in another way—by growing cotton on new lands. North of Paraná and in southwest São Paulo, virgin lands were put into cultivation in 1960. These have produced cotton of good quality with exceptionally high yields. From these areas and from the use of the new seed on older areas, Brazil can look forward to continued increases in cotton production and a crop of perhaps nearly 3 million bales in the next few years.

Local textile mills use only about 1,250,000 to 1,325,000 bales a year; thus, after allowing for small carryovers, Brazil will have sizable export surpluses. From the large crops forecast for 1962 in both the north and the south, exports this year might already exceed a million bales, with a value of around $140 million. In a few years, exports can be expected to approach 1,325,000 bales.

Brazil has regained or surpassed previous sales volume in several countries that used to be good customers for its cotton; and in some not previously interested, Brazilian cotton is winning a strong foothold. For the United States, Brazil's cotton recovery success has already meant stiffer competition in 5 of the 6 top markets—Japan, France, West Germany, Italy, and the United Kingdom.

—W. GARTH THORBURN



Jamaica Attains Independence

By AGNES G. SANDERSON
Regional Analysis Division
Economic Research Service

Jamaica has just joined the ranks of the independent countries.

This former British colony in the Caribbean belonged to the Federation of the West Indies, which existed from 1958 until this year; but by a referendum held in 1961, its people voted to withdraw from the Federation and to be independent. The United Kingdom complied with their wishes, and the island attained complete independence on August 6, 1962.

Jamaica's movement toward independence started in 1938 with the riots that stemmed from widespread unemployment in both rural and urban areas during a severe depression. The position of the workers was not safeguarded by the existing industrial and social legislation, which was generally defective and imperfectly enforced. A Royal Commission was appointed to investigate conditions, and after it submitted its report in December 1939, universal adult suffrage was granted. The colony obtained internal self-government 20 years later, on July 3, 1959.

The man who was in the heart of the struggle in 1938 is now going to lead an independent Jamaica as its Premier. He is Sir Alexander Bustamante, leader of the Jamaica Labor Party and Premier of the colony during the 10 years that ended in 1954.

Jamaica's ties with Britain remain close and friendly, but it plans to form other ties on a regional and international basis. Mr. Bustamante has expressed the country's desire to be a member of the British Commonwealth, and the British Government has promised a grant of $67.2 million. Jamaica has also decided to participate in the General Agreement on Tariffs and Trade and has applied for admission as a full member of the Organization of American States.

Lying to the south of Cuba, this beautiful Caribbean island has an area of 4,411 square miles (somewhat smaller than that of Connecticut). At the time of the 1960 census, its population was 1.6 million.

Agricultural Changes

Bananas and sugar have been Jamaica's principal crops traditionally; but ever since 1938, the government has been active in its efforts to improve and diversify agriculture. Consecutive 5-year and 10-year plans have been drawn up, aimed at increasing agricultural production and at improving the general economy of the island; and farmers have been given incentives to increase plantings of such alternative crops as citrus, cacao, coffee, and coconuts.

Steps taken to introduce modern methods of cultivation such as spraying and fertilizing have met with some measure of success. Financial, advisory, and cooperative assistance has been rereceived from British and U.S. organizations. U.S. technical assistance to Jamaica commenced in 1955.

Since World War II, the marketing of agricultural production has been increasingly centralized. Growers' associations and marketing boards have been created, to receive and ship all the principal export crops. Fruits and vegetables for local consumption are still sold through the traditional open markets; but some farmers' cooperatives have been formed, and their produce is sold to the Government Marketing Department for wholesale disposal to large volume buyers.

The training of young Jamaicans in modern farming is one assurance of a bright future for the country's agri-

culture. The Jamaica Agricultural School, founded in 1910, has an enrollment of about 170 students. The University College of the West Indies, established near Kingston in 1948 and completed in 1953, was amalgamated with the Imperial College of Tropical Agriculture in Trinidad in 1960. Despite the dissolution of the West Indies Federation and the new independence of both Jamaica and Trinidad (Trinidad's has just come—on August 31), the continuation of the college's present status seems assured. The two countries will continue to cooperate in several regional services.

Shifts in Trade

The many changes that have taken place in Jamaica's economy since 1938 are reflected to some degree in its export statistics, particularly those for sugar and bananas. Principal agricultural exports are shown here as a percentage of the total value of domestic exports of all products:

	1938	1948	1958	1961
Bananas	59.3	20.8	10.7	7.7
Sugar	17.4	32.1	22.2	23.9
Other agricultural	16.9	39.2	11.4	9.5
Total agricultural	93.6	92.1	44.3	41.1

During World War II, the banana industry declined sharply because of disease and reduced access to markets in the United Kingdom and Canada. The sugar industry, however, expanded rapidly, stimulated by Commonwealth Preference, and sugar replaced bananas as the chief export crop. Sugar has maintained its lead, having as incentives for farmers and exporters a quota at a guaranteed price and an assured market in the United Kingdom. However, its relative importance has declined as exports of minerals and mineral products have increased.

As in 1938, the United Kingdom and Canada are today the main markets for Jamaica's products. But it is not yet clear what would be the final effect of Britain's joining the Common Market. Though the United States provides an outlet for some of the island's spices and other products such as cacao, coffee, and essential oils, there seems to be little likelihood of its becoming an important taker of Jamaica's principal crops because of the production of similar crops in Hawaii and in associated tropical territories.

Economic Growth

Both the volume and the variety of manufactured and processed products are still being increased, not only to serve export markets but to meet the increasing consumer demand that has resulted from the island's rising income levels and standard of living. Besides sugar, processed products include coffee, cocoa, citrus (juices and segments), essential oils, and copra. From the copra, two factories produce cooking oil, margarine, and soap.

Industries attracted to the island by freedom from taxes include canneries, textile and shoe factories, a jute mill, and factories producing clay, paper, and metal products. Industry is making an increasing contribution to employment and national income. In 1950, its share of the Gross Domestic Product was a third that of agriculture; in 1961, its share exceeded agriculture's by $2.8 million.

The economy of the island received a boost with the discovery of bauxite in 1952. Jamaica's bauxite production is now the highest in the world and some of it is processed locally. Bauxite and alumina now account for over 49 percent of all exports.

Another growing industry is tourism. Over 227,000 tourists visited Jamaica in 1961, compared with 65,000 in 1937. The building of new hotels indicates confidence in the continued growth of this industry, which is the third largest source of income, following bauxite and sugar.

Agriculture's Future

The direction of Jamaica's future growth is indicated by the Prime Minister's expressed determination to devote attention to the "little man." With this objective, emphasis is being placed on increased food production, agricultural credit, and housing. After an unsuccessful appeal for better use of idle land, the Prime Minister declared his intention of pressing for a law that would empower tht government to lease unused land where there is urgent social and economic need.

In the revised Agricultural Development Program, top priority will be given to the island's livestock industry. Jamaica has engaged in commercial cattle raising for many years, but the supply of meat and dairy products falls far short of the demand. The Minister of Agriculture asserted at an agricultural show this year that every effort will be made to have the island itself produce most of the $12.4 million worth of livestock products it now buys from abroad.

About 20 percent of the livestock products referred to by the Minister come from the United States, including principally beef, pork, poultry meat, eggs, and baby chicks. For its dairy needs, Jamaica has developed a good dairy breed, the Jamaica Hope, which—with the beef breeds, Jamaica Brahman and Jamaica Black—can thrive on pangolagrass. This grass was first used in pastures in the early 1950's.

Little attention has been given in the past to improving food crops, which are grown almost entirely by small farmers. The most important of these crops are cassava, yams, sweetpotatoes, breadfruit, pulses, and corn. Recent findings show that the production of food crops exceeds that of export crops in value. So the Agriculture Department is planning to increase production of food crops and to establish a system of grading as an incentive to quality improvement. It is expected that this action will tend to reduce food imports, which amounted to over $40 million in 1961.

To improve the agricultural credit system, the Jamaican Government is obtaining qualified technicians and an agricultural credit adviser and has made funds available to the Agricultural Credit Board.

The recent arrival in Jamaica of 38 members of the Peace Corps for a 2-year period assures help in many areas important to rural life, including vocational and agricultural education, literacy, and social services.

Jamaica is blessed with both political stability and economic potential. Given these two essentials, it is estimated that the growth of the economy can be maintained at 6 to 7 percent a year. This will enable the country to keep ahead of its rapidly rising birth rate and to meet its numerous problems both old and new.

Guatemalan Rubber Industry

(Continued from page 8)

the new Central American Common Market. From 1957 through 1961, Guatemala imported an average of over 3.8 million pounds of rubber and rubber products annually. And although figures are not available for the other countries, it is believed that the annual rubber imports of the five countries involved in the Central American Market total at least 12 million pounds, the equivalent of production from 10,000 acres. As the Market develops, it is expected that local production sources will be favored—and Guatemala is the only member country with a full rubber program.

Rubber is also being encouraged to help alleviate unemployment caused by declining opportunities in the traditional crops, the high rate of population increase, and the country's still limited industry.

Establishment and care during the first 6 years of growth of the additional 36,000 acres of rubber will require approximately 16,000 man years of labor. By the time the projected 80,000 acres are in production, it is estimated that approximately 48,000 tons of crude rubber will be produced annually and that it will be worth about $19.2 million. Full-time employment will be provided for 15,000 men, thus improving the level of living of about 100,000 persons. In addition, there will be an appreciable increase in employment in the manufacture of rubber products.

Guatemala is well suited to rubber-growing. On its Pacific slope ecologic conditions prevent full development of the South American leaf blight which can be disastrous to rubber groves. And there as well as on the Atlantic coast, three-component trees are cultivated which are resistant to the leaf blight.

The country's sizable breeding, selection, and testing program now in operation should lead to higher-yielding planting material. With the material now in use, Guatemala can compete favorably on the world market, and as the new higher-yielding clones are planted, its competitive position will be further improved.

Floating Fair Brings U.S. Soybean Products To Norwegian Housewives

Early this summer, the ferryboat *Cort Adeler* cruised Norway's fjords for 20 days, carrying exhibits of the latest in household information and products to all the major ports on the south and west coasts. More than 90,000 visitors came aboard. And because the Soybean Council of merica had its exhibit right at the entrance, their first impression was the tantalizing fragrance of chicken, being deep-fried in soybean soil.

This demonstration was part of the Council's double-barreled effort to promote both soybean oil and poultry in Norway. One of the Norwegian firms cooperating makes and distributes much of the margarine, soybean table oil, and mayonnaise sold in the country. It passed out pieces of bread, half spread with a new margarine made 50 to 70 percent from soybean oil, half spread with a 100-percent soybean-oil mayonnaise.

The other firm markets most of the poultry sold at retail in Norway. It supplied the demonstration birds, at highly favorable prices.

The fair itself was sponsored by the Norwegian Women's Union, which sent many groups of visitors. Some came by boat from 50 miles away.

Above, chicken-frying show at "den flytende hussmormesse" (the housewives' traveling fair) aboard the Cort Adeler. Top, a crowd of cheerful Norwegians waiting their turn to visit.

Future for U.S. Wheat

(Continued from page 5)

ment controls which prevent segregation of specific qualities for domestic use or mixing of different grades, the United States still uses grain grades and standards which are based upon physical characteristics.

Only the Unites States and Argentina of the major wheat exporters fail to reclean wheat before export.

As a result, the average U.S. wheat exports contain 50 percent more unmillable materials (dockage, foreign material, and shrunken and broken kernels) than wheat exported by some of our competitors. While the amounts of such materials in U.S. wheat are relatively high and frequently give our wheat a poor appearance in foreign markets, records show that such material, even so, is well within the limits prescribed in the official standard.

Measures Needed

The remedies are reasonably clear—seemingly simple. They could hardly fail to aid us in gaining foreign cash markets. Two of them are of primary importance.

1. The grain trade and other interested groups should cooperate in the comprehensive review of wheat standards now being conducted by the U.S. Department of Agriculture. This review is designed to determine the immediate and long-range needs for improving the standards for end-use purposes. If needed changes are incorporated in the standards, it would make our wheat more competitive with wheat from other countries. The need for these changes is urgent.

2. Producers of hard wheat should be encouraged to increase the planting of those varieties with the best milling and baking qualities through a continuation of the sedimentation premiums in the price supports as well as discounts for undesirable varieties and those having low baking strength.

The higher premiums received in 1962 by those hard wheat producers who grew the stronger, higher sedimentation varieties of wheat are having a great influence upon other producers. Many of them will now change their planting in the fall of 1962 from the weaker varieties to the stronger varieties.

It is abundantly clear that the quality of hard wheat destined for export to dollar markets must be improved. This improvement is possible if producers will shift from "mellow" gluten varieties to "strong" gluten varieties wherever possible. There is no danger of an oversupply of strong wheat resulting from a shift to recommended strong gluten varieties. If, in addition to a better supply of strong gluten hard wheat, the standards are revised to enable exporters and importers to merchandise U.S. wheat in foreign markets with a precision that has been developed outside the grain standards by domestic traders, then and only then, can we expect to be truly competitive in dollar markets abroad.

The Foreign Agricultural Service believes the United States could sell a substantially larger volume of high baking strength wheat in Europe, Latin America, Asia, and Africa if it were available at competitive prices. The quality needed is similar to U.S. mill requirements in most markets, but even higher in tropical areas. Cleanliness must be equal to that of our competitors. Buyers are becoming more and more quality conscious and we need to recognize this by changing our grain standards to suit the buyer.

The opportunity to expand sales of U.S. wheat in the commercial dollar markets of the world is better today than it has been for many years. We are the only country with substantial carryover of hard wheat available for export. However, while the opportunity to do business is there, the extent to which we succeed in expanding these dollar sales will be highly related to our ability to improve quality and then our desire to market U.S. wheat on its own merits as a consistently high-quality product.

Working together, U.S. producers and the grain trade could have a bright future of expanding wheat exports. Certainly no other wheat-producing nation in the world is so richly blessed with favorable soil, climate, and human resources with which to do the job.

Bad Weather Lowers Farm Output in South America

Reduced output of important agricultural products because of bad weather in Brazil and the temperate zone of South America in 1961-62 may result in greater demand for U.S. agricultural products, particularly wheat.

Wet weather during harvest cut back Brazil's 1961-62 wheat production to 150,000 metric tons, the lowest crop in recent years. In the northeastern part of the country, extended drought caused emergency food shortages. Grain and livestock production in the major farm areas of Argentina, Chile, and Uruguay has gone down because of drought which began in 1961 and continued into 1962.

Current estimates hold out little hope for improved production in 1962-63. Continued dry weather has forced Argentina to reduce plantings of wheat and other small grains in its important southern cereal zone, and its wheat yield in 1962-63 may not exceed the low 5.1-million-bushel outturn of the past crop year. Drought has also reduced wheat plantings in Uruguay and lowered yields of feed grains.

Chile's Ministry of Agriculture reports that 1962 calendar year deficits in agricultural products include larger than usual quantities of wheat and feed grains. Chile has just negotiated a Food for Peace loan for $19.5 million to enable the country to buy U.S. wheat, flour, and other farm products on long-term credit.

Brazil's 1962 wheat imports may exceed those of 1961 by as much as one-half million tons. According to current estimates, Uruguay may need to import sizable quantities of wheat and feed grains during 1962-63.

Historically, Argentina has been the principal supplier of wheat for these deficit countries. However, Argentina's below normal production continues to restrict its wheat exports to these South American areas despite smaller domestic production. Adverse weather has, thus, both heightened their need for agricultural imports, especially grains, and hit the biggest source of supply. The result may be a rise in U.S. agricultural exports to this region during 1962-63.

TRADING POST

Italy Makes Its Biggest Purchase of U. S. Holsteins

The recent purchase of 48 U.S. Holstein bulls and heifers by Italian breeders is the largest consignment of that breed ever to go to Italy in one year—and the biggest Italian purchase of U.S. breeding stock since 1957. The cattle, chosen by the breeders in the United States, are valued at between $50,000 and $75,000.

Another outgrowth of the 3-year marketing program carried on in Italy by the Holstein-Friesian Association of America and FAS marketing specialists was an invitation to exhibit 20 Holsteins at the International Fair at Cremona, Italy, in mid-September.

Rhodesian Tobacco Growers Get Three New Varieties

The Rhodesian Government has added 3 new varieties of flue-cured tobacco to those that Rhodesian tobacco growers are permitted to raise.

The new varieties, the result of extensive research by specialists at Rhodesian tobacco research stations, put at 11 the number of flue-cured varieties whose seed can legally be grown, distributed, or exported.

Canadian Wheat Exports Set Record in 1961-62

Canadian wheat exports are expected to reach the record total of 333 million bushels in 1961-62.

Principal reason for the 10.8 percent hike in exports over the previous year's was Communist China's purchase of 75 million bushels, compared with 29 million in 1960-61.

Expectation that demand will continue at high levels has led Canadian farmers to increase this year's wheat land by 1.7 million acres. If growing conditions continue good, production could double last year's.

Sudan Takes Over Lead In Extra-Long Staple

Sudan's record cotton output in the 1961-62 season has for the first time edged Egypt out of top spot in world output of extra-long staple cotton.

The 925,000-bale outcome of Sudan's increased acreage and higher yields was substantially above the previous season's crop of 525,000—while Egypt's crop was cut back 17 percent by severe leaf worm damage and unfavorable growing conditions.

India, the United Kingdom, West Germany, and Italy were the biggest markets for Sudanese cotton during the August-January half of the current season—up 23 percent over the comparable period the previous year. (Sales to Communist countries slipped from 19 percent of total exports to 12).

Egypt, meanwhile, announced reduced cotton acreage for the 1962-63 season. Even so, with a return to usual per-acre yield, the 1.8 million bales forecast for next year would put Egypt back into a comfortable lead.

India Produces One-Third World's Growing Tea Crop

The world's 1962 tea crop of an estimated 2.2 billion pounds is expected to be 2.5 percent over that of 1961, largely through record production by India and Ceylon.

India's estimated 795 million pounds will keep the country well out front, with Ceylon next at 475 million.

Given good weather, India might hit its 1965 target of 900 million pounds. Marketing problems may then arise, because world demand, while on the upgrade, does not lean to "common" tea, which represents 60 percent of Indian output. Half of India's tea now goes to the United Kingdom, world's largest user. The United States, second largest, took 6 million fewer pounds in 1961 than the year before.

Argentina Makes First Shipment of Soybeans

Argentina's first export of soybeans (3,000 metric tons to West Germany) marks the beginning of what it hopes will be rapidly increasing exports and production.

Argentina estimates the 1962 crop at 10,000 tons, compared with 1,000 tons last year. An optimistic estimate puts next year's crop at 120,000 tons. New soybean seed varieties well adapted to Argentine soil and climate may encourage farmers to shift from raising sunflowers, which face serious disease and insect problems.

Australia May Find Record Fruit Pack Hard To Sell

Australia's 1962 canned peach and pear packs are headed for record production, with quantities the country may find difficult to market.

The canned peach pack has hit about 3.2 million cases—last year's was 1.7 million—and pears are running about 15 percent above 1961 totals. The canned apricot and fruit salad packs are the largest in recent years.

The United Kingdom is the principal market for Australia's canned fruit—to the extent that out of the estimated 1962 production of 5 million cases, 3.1 million will probably go to the United Kingdom. The California fruit industry, however, is expected to make a major effort to regain its previous prominent position in the U.K. market, now that quotas on U.S. fruit imports have been abolished.

U.S. Edible Oils Exports For 1961-62 Hit New Peak

U.S. exports of soybean and cottonseed oils are expected to shoot to a new high of 1.9 billion pounds for the 1961-62 year. Whopping big sales to Spain and Pakistan were responsible for the record total, which was 75 percent above that of 1960-61, and 30 percent above the peak of 2 years ago.

Spurred by low U.S. prices and a tight oil situation, Spain bought over 400 million pounds, compared to 288 million in 1960-61. Pakistan, also because of low prices, took over 200 million pounds under P.L. 480, compared to 58 million the previous year.

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Greece Speeds Up Program To Divert Wheat Acreage

New teeth in Greece's program to divert wheat acreage to cotton and other crops may soon increase the country's wheat imports.

Discontinuance of bread supports and warning of lower wheat supports are expected to accelerate the 3-year-old program which, so far, has achieved only a 6-percent cut in production and the halting of relatively small wheat exports for the past 2 years.

The government figures it cheaper to ease off its costly support program, even though it made Greece self-sufficient in wheat, in favor of imports. In the past 5 years, most Greek wheat imports have come from the United States under P.L. 480.

Dutch Demand for Tall Oil Likely to Increase

The Netherlands' consumption of tall oil has more than tripled in the past 2 years. The 4,616 short tons imported in 1961 is expected to increase substantially by the end of next year upon completion of a plant to supply other Common Market countries with the refined product.

Tall oil, a byproduct of paper production, is rapidly replacing rosin in European soft-soap manufacture, because it is cheaper.

The United States (world's top producer) was the major source of Dutch tall oil imports in 1960, but U.S. oil was largely supplanted in 1961 by lower-priced oil from Finland.

Peru's New 60-Day Livestock Quarantine Ups Import Cost

Peru's new ruling that imported livestock be held in quarantine for 60 days may make it uneconomic for U.S. and other breeders to ship cattle on consignment to Peru.

The cost of maintaining a consignment of cattle in quarantine for 60 days (including a caretaker) might make it advisable for the U.S. breeder to conclude any sale of cattle to Peruvian buyers this side of the Atlantic, rather than continue the present practice of exhibiting cattle at Peruvian fairs, followed by sale.

West German Rice Imports Show 40-Percent Gain

With most heavy buying out of the way for fiscal 1962, West German rice imports for the first 11 months stood at 151,000 metric tons, up 40 percent over the same period the previous year. Fifty-six percent of Germany's rice imports — mostly semi-milled — came from the United States.

Thailand and Japan Sign 1962 Agreement on Corn

Japan has agreed to buy a minimum of 400,000 metric tons of corn from Thailand by June 30, 1963.

The head of the Japanese feed mission to Thailand estimated that the rise of feed and industrial uses for corn in Japan could push import needs as high as 2 million tons during 1962. If Thailand's crop exceeds 600,000 tons, as is possible, Japan may well import more than its minimum.

India's Wheat Survives Cold To Reach New High

Official Indian estimates put 1961-62 wheat production at an alltime high of 11.8 million tons.

The 7.4-percent increase over the previous year's outturn is attributed to expanded acreage and higher yields per acre, despite the severe cold which hit many wheat areas in late 1961.

Should India's wheat production continue to climb as it has since 1935, India may import less wheat in the future. The country imports one-fith of its wheat requirements now, mainly from the United States under P.L. 480, and from Canada and Australia.

Larger wheat supplies allowed India to divert 20,000 tons of U.S. wheat to East Pakistan, where shortages exist.